

REMARKS

Claims 48-53 are pending for further examination.

Applicant thanks the Examiner for allowing claim 51 and for recognizing that claim 50 includes allowable subject matter. The remaining claims were rejected as follows:

* Claim 48 was rejected as unpatentable over U.S. Patent No. 5,730,271 (Buchman) in view of U.S. Patent No. 4,998,379 (Yamada et al.).

* Claims 49, 52 and 53 were rejected as unpatentable over the Buchman patent in view of U.S. Patent No. 6,209,944 (Billiu et al.).

As discussed below, applicant respectfully requests reconsideration.

Claims 49, 52 and 53 are patentable

Claim 49 recites a stacker mechanism that includes a stacker plate and a scissors arrangement in which a first arm is pivotally connected at a first end about a fixed point on the stacker plate and is slidably connected at its second end to a frame. The second arm is slidably connected at a first end to the stacker plate and is pivotally connected at its second end about a fixed point on the frame. The link arm is connected to the first arm at a pivot point *located between the scissor pivot point and the second end of the first arm (i.e., between the scissor pivot point and the end of first arm that is slidably connected to the frame)*. Applicant draws the Examiner's attention to the example of FIG. 18B in the Specification as well as the illustration at the bottom of page 5 in the Amendment dated June 10, 2005.

The Office action refers to the pusher mechanism 36 of the Buchman et al. patent (FIG. 5) which discloses a scissors-like arrangement. The Office action acknowledges that the Buchman et al. patent "fails to disclose a link arm connected to a scissor arm," but relies on the Billiu et al. patent for those features. In particular, the Office action alleges that the cylinder rod 52a (FIG. 4 of the Billiu et al. patent) corresponds to the claimed "link arm."

Applicant respectfully disagrees with the conclusion that the subject matter of claim 49 would have been obvious. First, the Billiu et al. patent is directed to a field (*i.e.*, stowable truck bed enclosures) that is completely different field from the field of the present application and the

Buchman et al. patent (*i.e.*, stackers for use in currency storage cassettes). At least for that reason, a person of ordinary skill would not have considered the Billiu et al. patent reasonably pertinent to the subject matter of the pending claims.

Second, as explained below, even if one were to somehow incorporate the Billiu et al. patent's scissors arrangement (with its hydraulic cylinder 52 and cylinder rod 52a) into the pusher mechanism of the Buchman et al. patent, that would not result in or suggest the subject matter of claim 49.

The Buchman et al. patent discloses an arrangement for driving a pusher mechanism 36 in a security box of a bill validator. A cam drive motor 24 rotates a drive cam 22, which contacts a drive plate 38 (FIG. 5). As the cam 22 rotates, it causes movement of the pusher mechanism 36 from the position shown in FIG. 4 to the position of FIG. 5.

The drive plate 38 is attached to an arm of the scissors arrangement. As shown in FIG. 5 of the Buchman et al. patent, the drive plate 38 is attached between a pivot point (near the middle of the arm) and a fixed end of the arm.

Likewise, as shown in FIG. 4 of the Billiu et al. patent, the cylinder rod 52a is connected to the scissors arm 44 at pivot pin 56 which is located between the pivot pin 46 (near the middle of the arm) and a fixed pivot bolt 48.

Even if one were somehow motivated to use the scissors arrangement of the Billiu et al. patent in the pusher mechanism of the Buchman et al. patent, at most that would suggest replacing the cam drive motor 24, the drive cam 22 and the drive plate 38 in the Buchman et al. patent (FIG. 5) with the hydraulic cylinder 52 and cylinder rod 52a of the Billiu et al. patent (FIG. 4). As explained above, the driving mechanisms of both those patents are attached to a scissors arm at a point between a pivot point (near the middle of the arm) and a fixed end of the arm. That is in contrast to the subject matter of claim 49, which recites that the link arm is connected to the first arm at a pivot point located "between the scissor pivot point and the second end of the first arm" (*i.e.*, between the scissor pivot point and the end of first arm that is slidably connected to the frame).

Similarly, even if one replaced the entire scissors arrangement of the Buchman et al. patent with the scissors arrangement of the Billiu et al. patent, the would result in an arrangement in which the cylinder rod 52a is connected to the scissors arm 44 at pivot pin 56 which is located between the pivot pin 46 (near the middle of the arm) and a fixed pivot bolt 48 (not "slidably connected").

At least for the foregoing reasons, claim 49 as well as dependent claim 52 should be allowed.

Independent claim 53, which recites a link arm connected to the first scissor arm at a pivot point located "between the scissor pivot point and a second end of the first scissor arm that is *slidably connected* to the frame," should be allowed for similar reasons.

Claim 48 is patentable

Claim 48 recites a stacker mechanism that includes a stacker plate and a drive means coupled to the stacker plate. The drive means includes non-circular drive gears. An example is illustrated in FIGs. 18A, 18B and 18C. In some implementations, the use of such gears can help prevent or reduce excessively large forces from being generated at the fully extended position of the stacker (*see* Specification at page 8, lines 8-21).

The Buchman et al. patent discloses an arrangement for driving a pusher mechanism 36 in a security box of a bill validator. A cam drive motor 24 rotates a drive cam 22, which contacts a drive plate 38. As the cam 22 rotates, it causes movement of the pusher mechanism 36 from the position shown in FIG. 4 to the position of FIG. 5.

The Office action acknowledges that drive cam 22 of the Buchman et al. patent does not include non-circular gears. However, the Office action relies on the Yamada patent for those feature (*see* gears 29, 31).

The Office action characterizes the Buchman et al. and Yamada patents as being reasonably pertinent to the particular problem with which the applicant is concerned because

they incorporate scissors-like linkages that vertically elevate a rigid horizontal member. Applicant respectfully disagrees.

The Buchman et al. patent relates to a pusher mechanism 36 for stacking bills in a security box associated with a bill validator. Likewise, pending claim 48 recites a stacker mechanism, which can be incorporated into a currency cassette for storing bills received from a bill validator. Although the Buchman et al. patent may be relevant to the subject matter of claim 48, the Yamada patent is not.

The pusher mechanism of the Buchman et al. patent and the stacker mechanism of the pending claim 48 both relate to pushing a bill through an opening so that the bill can be stacked in a currency cassette. As noted above, one problem addressed by the present application is avoidance of excessively large forces that may be generated when the stacker is in the fully extended position, particularly when the cassette is filled with currency (*see* Specification at page 8, lines 8-10). In contrast, the Yamada patent relates to an entirely different field (*i.e.*, vehicle windows) and addresses a very different problem (*i.e.*, the difficulty of opening a vehicle window only slightly (*see, e.g.*, col. 1, line 55 – col. 2, line 2)). Furthermore, whereas a problem addressed by the present application relates to what happens as the stacker is moved *toward its fully extended position*, the problem addressed by the Yamada patent relates to what happens as the window is opened (*i.e.*, how to facilitate opening the window slowly as it is *retracted from* its completely closed position (*see* col. 1, lines 64-65)).

In view of the very different filed and the very different problems addressed by the Yamada patent, applicant submits that a person of ordinary skill would not have considered that patent to be reasonably pertinent to the subject matter of pending claim 48. At least for those reasons, applicant respectfully requests reconsideration and withdrawal of the rejection of claim 48.

Conclusion

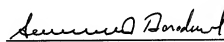
It is believed that all of the pending claims have been addressed. However, the absence of a reply to a specific rejection, issue or comment does not signify agreement with or

concession of that rejection, issue or comment. In addition, because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this paper should be construed as an intent to concede any issue with regard to any claim, except as specifically stated in this paper.

Please apply any charges or credits to deposit account 06-1050.

Respectfully submitted,

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